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ABSTRACT

A study was conducted at the City Colleges of Chicago to investigate how individual expectations and self-selected criteria for success correlate with academic self-concept and course achievement. At the beginning and end of the fall semester, students enrolled in six basic mathematics classes completed questionnaires containing the Michigan State Self-Concept of Ability Scale, which asks students to compare their math ability with that of their friends, and the National Longitudinal Study of Mathematics Ability Scale, which asks students what they think and feel about their math work. In addition, students were asked "What grade would make you feel successful in math?" and "What grade do you expect to get in this course?" in order to determine their self-selected criteria for success. Of the 135 women and 39 men initially enrolled in the six courses, 112 students passed with a grade of A to D, 30 failed with an F, and 32 withdrew or stopped attending class. Approximately 38% of the sample achieved a grade which they indicated would make them feel successful in math, and 53% achieved the grade they expected in the course. Students who did as well as they expected or wanted to displayed increased academic self-concept and raised their expectations for themselves, while students who did not meet their criteria for success showed no changes in academic self-concept but adjusted their criteria for success. (DAB)

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Affective Responses of Community College Students to Self-Selected Criteria of Success

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City Colleges of Chicago

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The purpose of this paper is to examine changes in the academic self-concepts of a group of community college students who have experienced success or failure according to their own criteria for success. Typically, academic self-concept is studied in relation to student success defined by grades or test scores. In this study, students are labelled successful if they met their own self-selected criteria, and unsuccessful if they did not.

Although educators have discussed the importance of self-concept for many decades, our theoretical and empirical knowledge about self-concept is spotty, and sometimes contradictory (Shavelson, Hubner & Stanton, 1976; Marsh & Smith, 1982). While many believe that self-concept can be viewed as having many facets (for example, academic, social, physical, and emotional, Shavelson et al., 1976) the evidence for this view is not clearcut. What is clear though, is that academic self-concept, however measured, is significantly correlated to school achievement. Bloom (1976) estimates the correlation to be approximately .50 after fifth grade. Other evidence (Kifer, 1975) indicates that academic self-concept changes over time and that successful and unsuccessful students become less and less like each other in terms of academic self-concept as their achievement patterns change. The point of this study is to demonstrate how individual expectations and self-selected criteria for success mediate between academic self-concept and school achievement.

METHOD

This study analyzed data collected in six basic mathematics classes at the City Colleges of Chicago during a sixteen week autumn semester.

The students involved in the study are representative of students enrolled in large urban community college districts--they are older than traditional college freshmen and sophomores, and they have relatively poor academic backgrounds. The sample contains 135 women (78%) and 39 men (22%). Of the 174 students initially enrolled in the six classes in the study, 112 passed with a grade of A to D, 30 failed with an F, and 32 withdrew or stopped attending class.

The students completed questionnaires containing two subject-specific academic self-concept scales, plus two items designed to measure their self-selected criteria for success at the beginning and end of the semester. Both of the self-concept scales refer specifically to mathematics as a school subject. The first, the Michigan State Self-Concept of Ability Scale (Brookover, 1964) contains eight items that require students to compare their mathematical abilities to their friends'. One item from the scale is "How do you rate your ability in math compared with your friends?" The second scale, the National Longitudinal Study of Mathematics Ability (NLSMA) scale was adapted by Crosswhite (1972) from the Coopersmith Self-Esteem Inventory (Coopersmith, 1967) for the NLSMA. The NLSMA scale is a behavioral measure of academic self-concept that asks students what they think and feel about their math work, rather than how they compare to other students. One item from this scale is, "I find it hard to talk in front of my mathematics class." Like the Brookover, the NLSMA scale has eight items. Both instruments are scored on a five-point scale with the value five assigned to the most favorable response and one to the least favorable. The scores reported here are mean scores, with possible ranges of 1.0 to 5.0. At the beginning of the semester the correlation between the scales was .65; at the end of the semester the correlation was .19.

Two questions assess the students' self-selected criteria of success. The first of these was, "What grade would make you feel successful in math?" and the second was "What grade do you expect to get in this class?" Students responded to these questions on a five-point scale (A=5, etc.). The beginning of the semester responses to these two question in conjunction with the actual final grades determined whether students met or did not meet their self-selected criteria. The first of these criteria is referred to here as the success criterion and the second as the grade expectation criterion. The correlation between these two items was .32 at both the beginning and end of the semester.

RESULTS

Table 1 contains the mean pretest and posttest scores on the two academic self-concept scales for students who met the two criteria of success as well as for students who did not meet these criteria. (The n's reported in the table are smaller than the n's mentioned above because the entire sample did not complete all measures.) About 38% of the entire sample met the success criterion. These students, primarily A and B students, exhibited a mean positive change from the beginning of the semester to the end of the semester equivalent to 1.4 standard deviations on the Brookover pretest distribution, and 0.8 standard deviations on the NLSMA pretest distribution[1]. The students who did not meet this criterion of success made very little change in affect from the pretest to the posttest.

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Tables 1 and 2 about here
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[1]Table 2 contains statistical tests of significance. The data were analyzed according to a two-factor design with one between-subject factor (criterion met or unmet) and one within-subject factor (pretest, posttest), using a multivariate model (Finn, 1977).

Similar results are apparent in relation to the grade expectation criterion, ("What grade do you expect to get in this class?"). A far greater proportion of students (53%) met this criterion than met the success criterion. The students who met their grade expectations changed 1.1 standard deviation units on the Brookover, and 0.5 on the NLSMA. Students who did not meet their grade expectation showed a slight negative change in affect.

Students display the same pattern of affective responses on two academic self-concept scales in relation to two self-selected criteria of success. The students who met their criteria have increased positive affect and the students who failed to meet their criteria showed little or no affective change.

Since the students answered the two self-selected criteria at the end as well as at the beginning of the semester, these scores can be examined to see whether they changed as a result of being met or not. In other words, did the students adjust their criteria of success in accordance with their actual performance at the end of the semester?

Table 1 also shows the mean beginning and end-of-semester scores on the two self-selected criteria for students who met each criterion and for those who did not. The first group of students (Met Criteria) raised these criteria at the end of the semester over their initial criteria at the beginning of the semester. The second group of students had much lower criteria at the end of the semester than they did at the beginning. The "successful" students raise their criteria while the "unsuccessful" lower theirs.

Although the students who failed to achieve as well as they had expected, or at levels that they said would make them feel successful, did not lower

their academic self-concept scores (see Table 1), they did lower these criteria for success. These students have adjusted their standards of accomplishment to maintain a greater consistency among achievement, affect, and the individually chosen criteria of success.

SUMMARY AND DISCUSSION

In sum, the results of the study showed that students who did as well or better than they wanted to or expected to displayed increased academic self-concept, and raised their expectations for themselves. Students who did not meet their criteria for success showed no changes in academic self-concept but adjusted their criteria for success. Other studies (Kifer, 1975) have shown that over longer periods of time unsuccessful students show an apparently inexorable decline in self-concept. These community college students seem to have reconciled the inconsistency between achievement and affect by lowering their own standards and expectations instead of lowering their academic self-concepts. This may be interpreted as a mechanism representing mature coping behavior (Abatso, 1979) by adult community college students who respond to a threat or problem (failing to meet the chosen criterion of success) by readjusting their criteria for success and defending their academic self-concepts.

It is doubtful, however, that these students who failed to meet their criteria of success will be able to defend their self-concepts over very long periods of time. Perhaps after another semester of failing to meet their own expectations these students will experience a decline in self-concept. These are students who have passed their courses in an environment of high failure rates, yet have not lived up to their own standards or expectations. Community college educators should address

this group of students who are potentially high achieving, successful students. With good instruction these students who pass courses but don't meet up to high expectations may join our high achieveing students, but with neglect will join the failures and dropouts, experiencing not only academic failure, but perhaps also the negative self-concepts that they avoided over the short term of this study.

Table 1

Changes in Affect and Self-Selected Criteria

		BROOKOVER		NLSMA		SELF-SELECTED CRITERIA[a]	
		Pretest	Posttest	Pretest	Posttest	Pretest	Posttest
Met Success Criterion	$\bar{X}$	3.29	3.83	3.63	4.08	4.45	4.81
	SD	.38	.41	.59	.63	.67	.40
	n	23	23	20	20	22	22
Success Criterion Unmet	$\bar{X}$	3.25	3.36	3.61	3.60	4.74	4.48
	SD	.50	.54	.55	.70	.54	.91
	n	58	58	47	47	46	46
Met Grade Expectation	$\bar{X}$	3.11	3.61	3.52	3.82	3.71	4.16
	SD	.47	.56	.57	.74	.61	.79
	n	42	42	37	37	38	38
Grade Expectation Unmet	$\bar{X}$	3.42	3.37	3.73	3.64	4.07	3.36
	SD	.42	.50	.54	.66	.66	.95
	n	39	39	30	30	28	28

[a]The first self-selected criterion is the success criterion (upper half of table) and the second is the grade expectation criterion (lower half of table).

Table 2

Summary of Statistics from Repeated Measures ANOVA and t-tests

	ANOVA Results			Within Group Differences[d]	
	Group[a]	Change[b]	Grp X Change[c]	Met Criterion Students	Criterion Unmet Students
Brookover change (Success Criterion)	F=5.91 p < .05	F=20.10 p < .01	F=11.75 p < .01	t=7.09 p < .01	t=1.67 ns
NLSMA change (Success criterion)	F=3.11 ns	F=2.55 ns	F=5.04 p < .05	t=3.84 p < .01	t=0.11 ns
Brookover change (Grade expectation)	F=0.13 ns	F=23.87 p < .01	F=34.41 p < .01	t=7.89 p < .01	t=0.63 ns
NLSMA change (Grade expectation)	F=0.01 ns	F=2.46 ns	F=6.33 p < .05	t=3.27 p < .01	t=0.64 ns
Criterion change (Success criterion)	F=0.02 ns	F=0.04 ns	F=9.12 p < .01	t=2.35 p < .05	t=2.01 p < .05
Criterion change (Grade expectation)	F=1.84 ns	F=0.20 ns	F=35.13 p < .01	t=3.81 p < .01	t=4.67 p .01

[a] The group factor compares Met Criterion students to Criterion Unmet students.

[b] The change factor compares pretest scores to posttest scores for all students.

[c] The interaction factor tests whether scores for Met Criterion students change differently from scores of Criterion Unmet students.

[d] The within group t-tests test the pretest posttest differences for met criterion and criterion unmet students separately.

REFERENCES

Abatso, Y.R. The coping personality: A study of black community college students. Ph.D. dissertation, University of Chicago, 1979.

Bloom, B.S. Human characteristics and school learning. New York: McGraw-Hill Book Company, 1976.

Brookover, W., Paterson, A. & Thomas, S. Self-concept of ability and school achievement. Sociology of Education, 1964, 37, 271-78.

Coopersmith, S. The antecedents of self-esteem. San Franisco: W.H. Freeman, 1967.

Crosswhite, F.J. Correlates of attitudes toward mathematics. In the National Longitudinal Study of Mathematics Ability, No. 20. Edited by Wilson, J.W. Palo Alto, California: School Mathematics Study Group, 1972.

Finn, J.D. Multivariance: Univariate and multivariate analysis of variance, covariance, regression and repeated measures. Chicago: National Educational Resources, Inc., 1977.

Kifer, E. Relationships between academic achievement and personality characteristics: A quasi-longitudinal study. American Educational Research Journal, 1975, 12, 191-210.

Marsh, H.W. & Smith, I.D. Multitrait-multimethod analyses of two self-concept instruments. Journal of Educational Psychology, 1982, 74 (3), 430-440.

Shavelson, R.J., Hubner, J. & Stanton, G.C. Self-concept: Validations of construct interpretations. Review of Educatioanl Research, 1976, 46, 407-441.

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